What is claimed is:

1. An absorbent article comprising:

a core comprised of pulp, a polymer or a combination thereof;

wherein the core has a maximum Distribution Index (DI_{max}) of at least about 6,000 g/m^3.

2. The absorbent article of claim 1, wherein the DI_{max} is at least about 6,500 g/m^3.

3. The absorbent article of claim 1, wherein the DI_{max} is at least about 7,000 g/m^3.

4. The absorbent article of claim 1, wherein the DI_{max} is at least about 7,500 g/m^3.

5. The absorbent article of claim 1, wherein the core is comprised of about 10% to about 90% by weight of particulate or fibrous SAP.

6. The absorbent article of claim 1, wherein the core is comprised of about 20% to about 80% by weight of particulate or fibrous SAP.

7. The absorbent article of claim 1, wherein the core is comprised of about 40% to about 70% by weight of particulate or fibrous SAP.

8. The absorbent article of claim 1, wherein the core has a minimum Distribution Index (DI_{min}) of about 2,800 g/m^3 to about 3,600 g/m^3.

9. The absorbent article of claim 1, wherein the core has a minimum Distribution Index (DI_{min}) of about 2,900 g/m^3 to about 3,300 g/m^3.

10. The absorbent article of claim 1, wherein the core has a minimum Distribution Index (DI_{min}) of about 2,950 g/m^3 to about 3,200 g/m^3.

11. The absorbent article of claim 1, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at -5,0 of at least about 5,750 g/m^3.

12. The absorbent article of claim 1, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 0,0 of at least about 6,000 g/m^3.

13. The absorbent article of claim 1, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 5,0 of at least about 5,750 g/m^3.

14. The absorbent article of claim 1, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 10,0 of at least about 4,250 g/m^3.

15. The absorbent article of claim 1, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 15,0 of at least about 3,250 g/m^3.

16. The absorbent article of claim 1, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) of at least 5,500 g/m^3 at each point along a centerline of the core from -5,0 to 5,0.

17. The absorbent article of claim 1, wherein the DI_{max} corresponds to a section of the core between 0,0 and 5,0.

18. An absorbent article comprising:

a core comprised of pulp, a polymer or a combination thereof;

wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at -5,0 of at least about 5,750 g/m^3 or a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 10,0 of at least about 4,250 g/m^3.

19. The absorbent article of claim 18, wherein the core is comprised of about 10% to about 90% by weight of particulate or fibrous SAP.

20. The absorbent article of claim 18, wherein the core is comprised of about 20% to about 80% by weight of particulate or fibrous SAP.

21. The absorbent article of claim 18, wherein the polymer is SAP and is substantially homogeneous throughout the core.

22. The absorbent article of claim 18, wherein the core is comprised of about 40% to about 70% by weight of particulate or fibrous SAP.

23. An absorbent article comprising:

a core comprised of pulp, a polymer or a combination thereof;

wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at -5,0 of at least about 5,750 g/m^3;

wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 0,0 of at least about 6,000 g/m^3;

wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 5,0 of at least about 5750 g/m^3;

wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 10,0 of at least about 4,250 g/m^3; and

wherein the core has a Distribution Index (DI) at i,j=15,0 of at least about 3,250 g/m^3.

24. An absorbent article comprising:

a core comprised of pulp, a polymer or a combination thereof; said core having a first Distribution Index (DI_{male}) measured at a male insult point and a second Distribution Index (DI_{female}) measured at a female insult point;

wherein the difference between the DI_{male} and the DI_{female} is at most about 1,000 g/m^3.

25. The absorbent article of claim 24, wherein the difference between the DI_{male} and the DI_{female} is at most about 900 g/m^3.

26. The absorbent article of claim 24, wherein the difference between the DI_{male} and the DI_{female} is at most about 600 g/m^3.

27. The absorbent article of claim 24, wherein the difference between the DI_{male} and the DI_{female} is at most about 400 g/m^3.

28. The absorbent article of claim 24, wherein the DI_{male} and the DI_{female} are substantially the same.

29. The absorbent article of claim 24, wherein the DI_{male} is at least about 4,200 g/m^3.

30. The absorbent article of claim 24, wherein the DI_{female} is at least about 5,500 g/m^3.

31. The absorbent article of claim 24, wherein DI_{max} of the article corresponds to a point on the centerline about equidistant between the male insult point and the female insult point.

32. The absorbent article of claim 24, wherein the core is comprised of about 10% to about 90% by weight of particulate or fibrous SAP.

33. The absorbent article of claim 24, wherein the core is comprised of about 20% to about 80% by weight of particulate or fibrous SAP.

34. The absorbent article of claim 24, wherein the polymer is SAP and is substantially homogeneous throughout the core.

35. The absorbent article of claim 24, wherein the core is comprised of about 40% to about 70% by weight of particulate or fibrous SAP.

36. An absorbent article comprising:

a core comprised of pulp, a polymer or a combination thereof; said core being said core being designed to provide a predetermined characteristic using general formula I:

$$DI_{(i,j)}\left(\frac{g}{m^2}\right) = \frac{100\left(\frac{cm}{m}\right)}{N}\sum_{T=1}^{N}\frac{BW_T}{\left(Dist_T + 7.62\right)} \qquad \text{(I)}$$

wherein N is the total number of core cells of the core, each core cell of the core corresponding to each of a plurality of 0.75 inch squares on a predetermined grid;

wherein T is each positive integer from 1 to N, each positive integer corresponding to each core cell of the core in numerical order;

wherein $DIST_T$ is a distance in centimeters (cm) between the center of the core cell corresponding to T and point i,j;

wherein BW_T is the basis weight of each core cell, each core cell corresponding to each value for T; and

wherein i,j is a coordinate representing a point on the core.

37. The absorbent article of claim 36, wherein the core has a DI of at least about 6,000 g/m^3.

38. The absorbent article of claim 36, wherein the core has a DI of at least about 6,500 g/m^3.

39. The absorbent article of claim 36, wherein the core has a DI of at least about 7,000 g/m^3.

40. The absorbent article of claim 36, wherein the predetermined characteristic is optimal absorbency, optimal cost efficiency, optimal compatibility for males and females, optimal comfort, optimal appearance or combinations thereof.

41. An absorbent article prepared by a process comprising

forming a core according to a predetermined maximum Distribution Index (DI_{max}); and

placing or forming the core into an absorbent article;

wherein the core is comprised of pulp, a polymer or a combination thereof.

42. The absorbent article of claim 41, wherein the DI_{max} is at least about 6,500 g/m^3.

43. The absorbent article of claim 41, wherein the DI_{max} is at least about 7,000 g/m^3.

44. The absorbent article of claim 41, wherein the DI_{max} is at least about 7,500 g/m^3.

45. The absorbent article of claim 41, wherein the core is comprised of about 10% to about 90% by weight of particulate or fibrous SAP.

46. The absorbent article of claim 41, wherein the core is comprised of about 20% to about 80% by weight of particulate or fibrous SAP.

47. The absorbent article of claim 41, wherein the core is comprised of about 40% to about 70% by weight of particulate or fibrous SAP.

48. The absorbent article of claim 41, wherein the core has a minimum Distribution Index (DI_{min}) of about 2,800 g/m^3 to about 3,600 g/m^3.

49. The absorbent article of claim 41, wherein the core has a minimum Distribution Index (DI_{min}) of about 2,900 g/m^3 to about 3,300 g/m^3.

50. The absorbent article of claim 41, wherein the core has a minimum Distribution Index (DI_{min}) of about 2,950 g/m^3 to about 3,200 g/m^3.

51. The absorbent article of claim 41, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at -5,0 of at least about 5,750 g/m^3.

52. The absorbent article of claim 41, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 0,0 of at least about 6,000 g/m^3.

53. The absorbent article of claim 41, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 5,0 of at least about 5,750 g/m^3.

54. The absorbent article of claim 41, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 10,0 of at least about 4,250 g/m^3.

55. The absorbent article of claim 41, wherein the core has a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 15,0 of at least about 3,250 g/m^3.

56. The absorbent article of claim 41, wherein the core has a Distribution Index of at least 5,500 g/m^3 at each point along a centerline of the core from 0,0 to 5,0.

57. The absorbent article of claim 41, wherein the DI_{max} corresponds to a a section on the core between 0,0 and 5,0.

58. An absorbent article prepared by a process comprising:

forming a core having a Distribution Index (DI) at i,j=0,0 of at least about 4750 g/m^3 or a Distribution Index (DI) at i,j=12,0 of at least about 5750 g/m^3; and

placing or forming the core into an absorbent article;

wherein the core is comprised of pulp, a polymer or a combination thereof.

59. An absorbent article prepared by a process comprising:

forming a core having a Distribution Index $_{i,j}$ ($DI_{i,j}$) at -5,0 of at least about 5,750 g/m^3, a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 0,0 of at least about 6,000 g/m^3, a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 5,0 of at least about 5,750 g/m^3, a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 10,0 of at least about 4,250 g/m^3; and a Distribution Index $_{i,j}$ ($DI_{i,j}$) at 15,0 of at least about 3,250 g/m^3;

wherein the core is comprised of pulp, a polymer or a combination thereof.

60. An absorbent article prepared by a process comprising:

forming a core comprised of pulp, a polymer or a combination thereof; the core having a first Distribution Index (DI_{male}) measured at a male insult point and a second Distribution Index (DI_{female}) measured at a female insult point;

wherein the difference between the DI_{male} and the DI_{female} is at most about 1,000 g/m^3.

61. The absorbent article of claim 60, wherein the difference between the DI_{male} and the DI_{female} is at most about 900 g/m^3.

62. The absorbent article of claim 60, wherein the difference between the DI_{male} and the DI_{female} is at most about 600 g/m^3.

63. The absorbent article of claim 60, wherein the difference between the DI_{male} and the DI_{female} is at most about 400 g/m^3.

64. The absorbent article of claim 60, wherein the DI_{male} and the DI_{female} are substantially the same.

65. The absorbent article of claim 60, wherein the DI_{male} is at least about 4,200 g/m^3.

66. The absorbent article of claim 60, wherein the DI_{female} is at least about 5,500 g/m^3.

67. The absorbent article of claim 60, wherein the DI_{max} corresponds to a point on the centerline about equidistant between the male insult point and the female insult point.

68. An absorbent article prepared by a process comprising:

selecting a Distribution Index (DI) or Distribution Index (DI) profile;

forming a core wherein the DI or DI profile is characterized by the general formula (I):

$$DI_{(i,j)}\left(\frac{g}{m^2}\right) = \frac{100\left(\frac{cm}{m}\right)}{N}\sum_{T=1}^{N}\frac{BW_T}{\left(Dist_T + 7.62\right)} \qquad (I)$$

wherein N is the total number of core cells of the core, each core cell of the core corresponding to each of a plurality of 0.75 inch squares on a predetermined grid;

wherein T is each positive integer from 1 to N, each positive integer corresponding to each core cell of the core in numerical order;

wherein $DIST_T$ is a distance in centimeters (cm) between the center of the core cell corresponding to T and point i,j;

wherein BW_T is the basis weight of each core cell, each core cell corresponding to each value for T; and

wherein i,j is a coordinate representing a point on the core.

69. An absorbent article comprising:

a core comprised of pulp, a polymer or a combination thereof;

wherein the core has a Distribution $Index_{i,j}$ ($DI_{i,j}$) that is substantially the same at a first insult point and a second insult point, the first insult point being the insult point at commencement of use of the absorbent article and the second insult point being the insult point after use of the absorbent article.

70. The absorbent article of claim 69, wherein the core has a Distribution Index Profile tailored in accordance with the expected shift in position of the insult point over time resulting from sagging of an absorbent article during use.

71. The absorbent article of claim 69, wherein the Distribution Index$_{i,j}$ ($DI_{i,j}$) is substantially the same at every point on the core along a line between the first insult point and the second insult point.

72. The absorbent article of claim 69, wherein the absorbent article is a nighttime diaper.

73. The absorbent article of claim 69, wherein the absorbent article is a travel diaper.

74. The absorbent article of claim 69, wherein the absorbent article is an extended-use diaper.

75. A method for preparing an absorbent article comprising:

selecting a Distribution Index at a point on a core or selecting a Distribution Index profile for a core;

forming the core according to the selected Distribution Index or Distribution Index profile; and.

placing or forming the core into the absorbent article;

wherein the core is comprised of pulp, a polymer or a combination thereof.

76. A method for determining the Distribution Index (DI) of an absorbent article comprising:

obtaining a core;

removing a plurality of samples from the core each sample corresponding to a core cell;

determining the basis weight of each core cell;

determining the distance from the center of each core cell (T) to an insult point; and

calculating the DI Index for the insult point according to general formula (I):

$$DI_{(i,j)}\left(\frac{g}{m^2}\right) = \frac{100\left(\frac{cm}{m}\right)}{N}\sum_{T=1}^{N}\frac{BW_T}{\left(Dist_T + 7.62\right)} \qquad \text{(I)}$$

wherein N is the total number of core cells of the core, each core cell of the core corresponding to each of a plurality of 0.75 inch squares on a predetermined grid;

wherein T is each positive integer from 1 to N, each positive integer corresponding to each core cell of the core in numerical order;

wherein $DIST_T$ is a distance in centimeters (cm) between the center of the core cell corresponding to T and point i,j;

wherein BW_T is the basis weight of each core cell, each said core cell corresponding to each value for T; and

wherein i,j is a coordinate representing a point on the core.